WHAT IS CLAIMED IS:

1. A liquid phase growth process comprising the steps of:

immersing a substrate in a melt held in a crucible, a crystal material having been dissolved in the melt; and

growing a crystal on the substrate, wherein;

the process has the step of rotating the crucible independently from the substrate, where the substrate is disposed at a position set aside from the center of rotation of the crucible, and the crystal is grown on the surface of the substrate thus disposed.

2. The liquid phase growth process according to claim 1, wherein the substrate is supported with a supporting rack and is so disposed that the surface of the substrate is in the direction substantially parallel to the flow of the melt in the crucible, at the position set aside from the center of rotation of the crucible, and the crystal is grown on the surface of the substrate thus disposed.

3. The liquid phase growth process according to claim 2, wherein the flow of the melt is chiefly caused by the rotation of the crucible.

4. The liquid phase growth process according to

claim 1, wherein a flow adjusting means is provided stationarily in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

5. The liquid phase growth process according to claim 1, wherein a flow adjusting means is provided rotatably in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

6. The liquid phase growth process according to claim 1, wherein the crucible is rotated alternately in the clockwise and anticlockwise directions.

7. The liquid phase growth process according to claim 1, wherein at least the substrate is caused to move up and down.

8. The liquid phase growth process according to claim 1, wherein at least the substrate is so supported with the supporting rack that the substrate surface stands substantially horizontal.

9. The liquid phase growth process according to claim 1, wherein the substrate comprises at least a group of substrates arranged keeping stated intervals

one another, in the direction which falls at right angles with the axis of the center of rotation of the crucible.

10. The liquid phase growth process according to claim 1, wherein the substrate comprises a plurality of groups independent from one another, and all groups are immersed in the same melt.

11. The liquid phase growth process according to claim 10, wherein a plurality of groups of substrates are disposed around the axis at the center of rotation of the crucible.

12. A liquid phase growth system comprising a crucible and a substrate-supporting rack, wherein the substrate-supporting rack supports the substrate at a position inside the crucible and set aside from the center of rotation of the crucible.

13. The liquid phase growth system according to claim 12, which further comprises a temperature control means by which the melt held in the crucible and having a crystal material dissolved therein is controlled to a preset temperature and a rotating means which rotates the crucible, and the supporting rack supports the substrate in substantially parallel to the flow of the

melt in the crucible.

14. The liquid phase growth system according to claim 12, wherein the flow of the melt is chiefly caused by the rotation of the crucible.

15. The liquid phase growth system according to claim 12, wherein a flow adjusting means is provided stationarily in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

16. The liquid phase growth system according to claim 12, wherein a flow adjusting means is provided rotatably in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

17. The liquid phase growth system according to claim 16, wherein the flow adjusting means comprises a fin set upright from the inner peripheral wall of the crucible toward its center, and/or a fin set upright from the inner bottom surface of the crucible being rotated; the former being so set upright as to be in a greater height toward the top of the crucible, and the latter being so set upright as to be in a greater height toward the center of the crucible.

18. The liquid phase growth system according to claim 12, wherein the crucible is rotated alternately in the clockwise and anticlockwise directions.

19. The liquid phase growth system according to claim 15, wherein the crucible is rotated alternately in the clockwise and anticlockwise directions, and the flow adjusting means has a rectifying surface which is symmetrical in the clockwise and anticlockwise directions.

20. The liquid phase growth system according to claim 12, wherein at least a group of substrates are caused to move up and down.

21. The liquid phase growth system according to claim 12, wherein at least a group of substrates are so supported with the supporting rack that the substrate surfaces stand substantially horizontal.

22. The liquid phase growth system according to claim 12, wherein at least a group of substrates supported with the supporting rack are arranged keeping stated intervals one another, in the direction which falls at right angles with the axis of the center of rotation of the crucible with respect to the supporting rack.

23. The liquid phase growth system according to claim 12, wherein the substrate comprises a plurality of groups independent from one another, and all groups are immersed in the same melt.

24. The liquid phase growth system according to claim 12, wherein a plurality of groups of substrates are disposed around the axis at the center of rotation of the crucible.

25. The liquid phase growth system according to claim 12, which further comprises a crystal growth heater which holds therein the crucible which holds the melt, the supporting rack which supports the substrate, and the melt-flow adjusting means;

the crystal growth heater being provided with an opening-closing means which keeps the inside of the heater airtight when the crystal is grown on the substrate, and opens or closes the heater when the substrate is brought in or brought out.

26. A substrate member production method comprising:

immersing a substrate in a melt held in a crucible, a crystal material having been dissolved in the melt; and

growing a crystal on the substrate, wherein;

the method has the step of rotating the crucible independently from the substrate, where the substrate is disposed at a position set aside from the center of rotation of the crucible, and the crystal is grown on the surface of the substrate thus disposed.

27. A liquid phase growth process comprising the steps of:

immersing a substrate in a melt held in a crucible, the substrate being supported with a supporting rack, and a crystal material having been dissolved in the melt; and

growing a crystal on the substrate, wherein;

the method has the step of rotating the supporting rack, where the substrate is disposed at a position set aside from the center of rotation of the supporting rack, and the crystal is grown on the surface of the substrate thus disposed.

28. The liquid phase growth process according to claim 27, wherein the substrate is so disposed that the surface of the substrate is in the direction substantially parallel to the flow of the melt in the crucible, at the position set aside from the center of rotation of the supporting rack, and the crystal is grown on the surface of the substrate thus disposed.

29. The liquid phase growth process according to claim 28, wherein the flow of the melt is chiefly caused by the rotation of the supporting rack.

30. The liquid phase growth process according to claim 27, wherein a flow adjusting means is provided stationarily in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

31. The liquid phase growth process according to claim 27, wherein a flow adjusting means is provided rotatably in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

32. The liquid phase growth process according to claim 27, wherein the supporting rack is rotated alternately in the clockwise and anticlockwise directions.

33. The liquid phase growth process according to claim 27, wherein at least the substrate is caused to move up and down.

34. The liquid phase growth process according to claim 27, wherein at least the substrate is so

supported with the supporting rack that the substrate surface stands substantially horizontal.

35. The liquid phase growth process according to claim 27, wherein the substrate comprises at least a group of substrates arranged keeping stated intervals one another, in the direction which falls at right angles with the axis of the center of rotation of the supporting rack.

36. The liquid phase growth process according to claim 27, wherein the substrate comprises a plurality of groups independent from one another, and all groups are immersed in the same melt.

37. The liquid phase growth process according to claim 36, wherein a plurality of groups of substrates are disposed around the axis at the center of rotation of the supporting rack.

38. A liquid phase growth system comprising a crucible and a substrate-supporting rack, wherein the substrate-supporting rack supports the substrate at a position inside the crucible and set aside from the center of rotation of the supporting rack.

39. The liquid phase growth system according to

claim 38, which further comprises a temperature control means by which the melt held in the crucible and in which a crystal material has been dissolved is controlled to a preset temperature and a rotating means which rotates the supporting rack, and the supporting rack supports the substrate in substantially parallel to the flow of the melt in the crucible.

40. The liquid phase growth system according to claim 38, wherein the flow of the melt is chiefly caused by the rotation of the supporting rack.

41. The liquid phase growth system according to claim 38, wherein a flow adjusting means is provided stationarily in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

42. The liquid phase growth system according to claim 38, wherein a flow adjusting means is provided rotatably in the melt to make the flow of the melt inclined toward the center of rotation and/or the liquid surface of the melt.

43. The liquid phase growth system according to claim 42, wherein the flow adjusting means comprises a fin set upright from the inner peripheral wall of the

crucible toward its center, and/or a fin set upright from the inner bottom surface of the crucible; the former being so set upright as to be in a greater height toward the top of the crucible, and the latter being so set upright as to be in a greater height toward the center of the crucible.

44. The liquid phase growth system according to claim 38, wherein the supporting rack is rotated alternately in the clockwise and anticlockwise directions.

45. The liquid phase growth system according to claim 38, wherein the supporting rack is rotated alternately in the clockwise and anticlockwise directions, and the flow adjusting means has a rectifying surface which is symmetrical in the clockwise and anticlockwise directions.

46. The liquid phase growth system according to claim 38, wherein at least a group of substrates are caused to move up and down.

47. The liquid phase growth system according to claim 38, wherein at least a group of substrates are so supported with the supporting rack that the substrate surfaces stand substantially horizontal.

48. The liquid phase growth system according to claim 38, wherein at least a group of substrates supported with the supporting rack are arranged keeping stated intervals one another, in the direction which falls at right angles with the axis of the center of rotation of the supporting rack with respect to the supporting rack.

49. The liquid phase growth system according to claim 38, wherein the substrate comprises a plurality of groups independent from one another, and all groups are immersed in the same melt.

50. The liquid phase growth system according to claim 38, wherein a plurality of groups of substrates are disposed around the axis at the center of rotation of the supporting rack.

51. The liquid phase growth system according to claim 38, which further comprises a crystal growth heater which holds therein the crucible which holds the melt, the supporting rack which supports the substrate, and the melt-flow adjusting means;

the crystal growth heater being provided with an opening-closing means which keeps the inside of the heater airtight when the crystal is grown on the substrate, and opens or closes the heater when the

substrate is brought in or brought out.

52. A substrate member production method comprising:

immersing a substrate in a melt held in a crucible, the substrate being supported with a supporting rack, and a crystal material having been dissolved in the melt; and

growing a crystal on the substrate, wherein;

the method has the step of rotating the supporting rack, where the substrate is disposed at a position set aside from the center of rotation of the supporting rack, and the crystal is grown on the surface of the substrate thus disposed.